

SECTION 06 4100

ARCHITECTURAL WOOD CASEWORK

LANL MASTER SPECIFICATION

When editing to suit project, author shall add job-specific requirements and delete only those portions that in no way apply to the activity (e.g., a component that does not apply). To seek a variance from applicable requirements, contact the ESM Architectural POC.

When assembling a specification package, include applicable specifications from all Divisions, especially Division 1, General Requirements.

Delete information within "stars" during editing.

Specification developed for ML-3 projects. For ML-1 / ML-2, additional requirements and QA reviews are required.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Custom fabricated cabinet units
- B. Countertops
- C. Miscellaneous wood shelving

1.2 REFERENCES

- A. The following documents, including others referenced herein, form a part of this Specification to the extent designated:
 - 1. Architectural Woodwork Institute (AWI)

Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program
 - 2. American National Standards Institute/Builders Hardware Manufacturers Association (ANSI/BHMA)

ANSI/BHMA A156.9 Cabinet Hardware
ANSI-BHMA A156.18 Materials and Finishes
 - 3. National Electrical Manufacturers Association (NEMA)

NEMA GP50, for horizontal surfaces
NEMA GP28, for vertical surfaces
NEMA LD-3 BK20, backing sheet

1.3 SUBMITTALS

- A. Submit the following in accordance with Section 01 3300, Submittal Procedures:
 - 1. Shop drawings of architectural woodwork indicating component profiles, fastening methods, jointing details, and accessories at a minimum scale of 1 1/2 inch equals one foot.
 - 2. Catalog data for hardware and specialty items.

1.4 QUALITY ASSURANCE

- A. Provide materials and perform work in accordance with above referenced documents.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Protect woodwork during transit, delivery, storage and handling to prevent damage, soiling and deterioration.
- B. Do not deliver casework until painting, wet work and similar operations that could damage casework have been completed in installation areas. If casework must be stored in other than installation areas, store only in areas meeting requirements for installation areas.

1.6 PROJECT CONDITIONS

- A. Do not install casework until required temperature and relative humidity have been stabilized, and will be maintained in installation areas in accordance with AWI instructions.

PART 2 PRODUCTS

2.1 LUMBER MATERIALS

If cabinetwork is to have a painted finish, softwood is the logical material. Hardwood is the best for natural finishes.

- A. Softwood lumber: PS 20, AWI Custom grade; average moisture content of 4-9 percent.

OR

- B. Hardwood lumber: NHLA, AWI Custom grade; average moisture content of 4-9 percent; vertical grain suitable for transparent finish.

2.2 PANEL PRODUCTS

- A. Softwood plywood: PS 1, AWI Custom grade, with particleboard core material.

- B. Hardwood plywood: PS 51, AWI Custom grade, with particleboard core material and red oak face veneer.
- C. Particleboard: AWI standard, Medium density, with Type 1 water resistant adhesive; of grade to suit application; sanded faces.
- D. Hardboard: Standard grade, untempered smooth one side.

2.3 OVERLAYS – HIGH PRESSURE LAMINATES

- A. Plastic laminate: [NEMA GP50, 0.050 inch for horizontal surfaces] [NEMA GP28, 0.28 inch for vertical surfaces] matte finish faces.
- B. Backing sheet: NEMA LD-3 BK20, backing grade, 0.020 inch, undecorated plastic sheet.
- C. Adhesives (non-toxic, formaldehyde free) as recommended by plastic laminate manufacturer.

2.4 ACCESSORIES

- A. Plastic laminate self-edge trim on plastic laminate faced panels.
- B. Matching wood veneer tape on hardwood faced panels.
- C. Plastic edge trim; extruded flat shape, smooth surface finish, self locking serrated tongue, of width to match panel, color as selected, on painted softwood panels.
- D. Clear, heat strengthened, 1/4 inch safety glass for wall cabinet doors.
- E. Fasteners of size and type to suit application.
- F. Concealed joint fasteners of threaded steel.

2.5 HARDWARE

- A. Cabinet and casework hardware to conform to ANSI/BHMA A156.19, Grade 1. Hardware finishes as designated in ANSI/BHMA A156.18.
- B. Shelf standards: Formed steel channels, cut for support brackets at 1-inch centers, satin chrome finish.
- C. Support brackets: Steel brackets formed to fit slots in standards, for nominal 12-inch shelves, satin chrome finish.
- D. Drawer and door pulls: Recessed, satin chrome steel or plastic, as appropriate.
- E. Cabinet locks: Keyed cylinder, two keys per lock, steel with polished chrome finish.
- F. Door catches: Magnetic type.

- G. Drawer slides: Galvanized steel with ball bearings separating tracks, full extension type.
- H. Hinges: Knuckle disappearing type.

2.6 FABRICATION

- A. Fabricate products to AWI Custom grade standards for [Reveal Overlay] [Flush Overlay] [Exposed Face Frame] design.
- B. Comply with requirements of referenced quality standard for moisture content of lumber at time of fabrication, and for humidity conditions in the installation area.
- C. Before fabricating casework, obtain field measurements and verify dimensions and shop drawing details as required for accurate fit to other work.
- D. Fabricate casework to dimensions, profiles and details indicated. Provide openings and mortises precut, where possible, to receive hardware, other items and other work. Locate openings accurately, using templates or roughing-in diagrams for proper size and shape. Smooth edges of cutoffs and, where located in countertops and similar exposures, seal edges of cutouts with a water resistant coating.
- E. Ease edges to 1/16 inch radius at corners of cabinets and edges of solid wood (lumber) members less than 1-inch in nominal thickness, 1/8-inch radius for edges of rails and similar members over 1-inch in nominal thickness.
- F. Finish shelves, doors, and exposed edges with appropriate edging, wood veneer tape, plastic laminate or plastic extrusion. Use one piece for full length only.
- G. Door and drawer fronts: 3/4 inch thick.
- H. Apply plastic laminate finish in full, uninterrupted sheets, consistent with manufactured sizes. Fit corners and joints hairline, secure with concealed fasteners.
- I. Apply laminate backing sheet to reverse sides of plastic laminate faced surfaces.
- J. Complete fabrication, assembly, finishing, hardware installation, and other work before shipment to project site to maximum extent possible. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming and fitting.
- K. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.
- L. Casework and cabinet hardware shall be furnished by the casework/cabinet manufacturer.

2.7 FINISHES

- A. Painted finish: One coat of primer, 2 coats of semi-gloss latex acrylic enamel as specified in Section 09900.

OR

- B. Natural finish: Sanding sealer, stain and 2 coats of satin polyurethane as specified in Section 09900.

PART 3 EXECUTION

3.1 INSPECTION

- A. Verify presence and accuracy of backing and support framing.
- B. Verify locations and sizes of utility rough-ins associated with casework.

3.2 INSTALLATION

- A. Set and secure casework in place, rigid, plumb and level.
- B. Use fixture attachments in concealed locations for wall mounted components.
- C. Use concealed joint fasteners to align and secure adjoining cabinet units and countertops.
- D. Carefully scribe and cut casework abutting other Work, with gaps of 1/32 inch maximum. Do not use additional overlay trim for this purpose.
- E. Secure cabinets to floor using appropriate angles and fasteners.

3.3 ADJUSTING

- A. Adjust moving or operating parts to function smoothly and correctly.

3.4 CLEANING

- A. Clean casework, counters, shelves, hardware, fittings and fixtures.

END OF SECTION

Do not delete the following reference information:

FOR LANL USE ONLY

This project specification is based on LANL Master Specification 06 4100 Rev. 0, dated January, 2006.